

DOCKET NO. D-1965-039 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Village of Liberty
Wastewater Treatment Plant
Village of Liberty, Sullivan County, New York**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Delaware Engineering, P.C. on behalf of the Village of Liberty on April 9, 2012 (Application), for review of modifications to an existing wastewater treatment plant (WWTP). State Pollutant Discharge Elimination System (SPDES) Permit No. NY0030074 for this project was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 1, 2010.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Sullivan County Planning Department has been notified of pending action. A public hearing on this project was held by the DRBC on December 5, 2012.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew approval of the existing 2.0 million gallons per day (mgd) Village of Liberty WWTP and to approve proposed modifications to the facility that will not result in the hydraulic capacity increasing. Modifications include replacement of the brush aerators within the two oxidation ditches with diffused air grids and large propeller mixers, as well as the replacement of the bar screens.

2. Location. The WWTP will continue to discharge treated effluent to an unnamed tributary (UNT) of the East Branch Mongaup River above the Swinging Bridge Reservoir at River Mile 261.1 – 23.56 – 8.12 – 0.86 (Delaware River – Mongaup River – East Branch Mongaup River - UNT) via Outfall No. 001, in the Village of Liberty Sullivan County, New York. The WWTP and its related discharge are located in the drainage area to the Upper Delaware Special Protection Waters (SPW) area as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 47' 00"	74° 42' 49"

3. **Area Served.** The existing WWTP will continue to serve the Village of Liberty, Sullivan County, New York. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder operates an existing 2.0 mgd WWTP. The docket holder is proposing to replace the brush aerators within the two oxidation ditches with diffused air grids and large propeller mixers, as well as the replacement of the bar screens at this time. These are the first modifications of a planned phased upgrade to the facility. The proposed modifications, nor those in the future, are expected to increase the hydraulic capacity of the WWTP.

b. **Facilities.** The existing WWTP consists of a trash rack, a parshall flume, mechanical bar screens, an aerated grit chamber, a comminutor, a splitter box, two oxidation ditches, two clarifiers, a belt press, an ultraviolet (UV) disinfection unit, and a post aeration tank.

The modified WWTP will consist of a trash rack, a parshall flume, manual bar screens, an aerated grit chamber, a fine screen with compactor, a splitter box, two oxidation ditches, two clarifiers, a belt press, an ultraviolet (UV) disinfection unit, and a post aeration tank.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WWTP has a generator installed capable of providing emergency power. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations. The existing WWTP has a remote alarm system installed that continuously monitors plant operations. (SPW)

The docket holder's existing wastewater treatment facility has prepared an emergency management plan (EMP) in accordance with Commission requirements, which was submitted in the Application. Commission staff have determined this EMP is acceptable and the docket holder shall implement the EMP accordingly. (SPW)

The project facilities aren't located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State-approved) facility.

c. **Water withdrawals.** The potable water supply in the project service area is supplied by the docket holder. The docket holder's Application states that an application for the withdrawal will be submitted shortly. DECISION Condition II.x. of this docket requires that an

application for the withdrawal be submitted within 60 days of approval of this docket (by February 3, 2013).

d. SPDES Permit / DRBC Docket. SPDES Permit No. NY0030074 was approved by the NYSDEC on June 1, 2010 and includes final effluent limitations for the project discharge of 2.0 mgd to surface waters classified by the NYSDEC as a Class B(T) stream designated for swimming, recreational, and trout fishing uses. The following average monthly effluent limits are among those listed in the SPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in SPDES Permit

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6.5 to 8.5 at all times	As required by SPDES Permit
Total Suspended Solids	30 mg/l	As required by SPDES Permit
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal*)	As required by SPDES Permit
Ammonia Nitrogen (6-1 to 10-31) (11-1 to 5-31)	1.4 mg/l 4.0 mg/l	As required by SPDES Permit
Fecal Coliform (5-15 to 10-15)	200 colonies per 100 ml as a geo. avg.	As required by SPDES Permit
Phosphorus	1.0 mg/l	As required by SPDES Permit
Total Kjeldahl Nitrogen	Monitor & Report	As required by SPDES Permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l *	Quarterly **

* DRBC Requirement

** See DECISION Condition II.u.

Dissolved oxygen and nitrate + nitrite as nitrogen are two parameters monitored for by the Commission in the Middle and Upper Delaware SPW area. Due to the docket holder's WWTP discharging above the Mongaup System Reservoirs, these parameters were not included for monitoring in this docket.

e. Cost. The overall cost of this project is estimated to be \$1,904,948.

f. Relationship to the Comprehensive Plan. The 2.0 mgd Village of Liberty WWTP was included in the Comprehensive Plan on April 28, 1965 upon approval of Docket No. D-65-39 CP. Issuance of this docket will continue the WWTP approval in the Comprehensive Plan (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to renew approval of the existing 2.0 mgd Village of Liberty WWTP and to approve proposed modifications to the facility that will not result in the hydraulic capacity increasing. Modifications include replacement of the brush aerators within the two oxidation ditches with diffused air grids and large propeller mixers, as well as the replacement of the bar screens.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *WQR*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program.

The docket holder's WWTP discharges treated effluent to an UNT of the East Branch Mongaup River above the Swinging Bridge Reservoir which is located in the Mongaup System. Although the WWTP is located in the tributary area to the Upper Delaware River SPW area, the Mongaup System is one of the major surface water impoundments that are listed in Section 3.10.3A.2.g.5) and the docket holder's WWTP is exempt from the SPW requirements, as outlined in Article 3.10.3A.2. of the Commission's *WQR*.

The docket holder is performing substantial alterations or additions as defined in Section 3.10.3A.2.a.16) of the Commission's *WQR*. As a result, a no measurable change (NMC) to existing water quality (EWQ) analysis and natural treatment alternatives (NTA) analysis are required to be submitted prior to approval of the modifications in accordance with the Commission's *WQR*. Factoring in the time of travel and relevant hydraulic and limnological factors that exempt the facility from submitting a NPSPCP, the Commission's SPW Comment Response document exempts WWTP discharges above major reservoirs, like those in the Mongaup System, from performing these two analyses. As such, grandfathered loads do not need to be established for these types of facilities and monitoring for SPW parameters not already found in the docket holder's SPDES Permit have been deemed unnecessary.

At the project site, the UNT of the East Branch Mongaup River has an estimated seven-day low flow with a recurrence interval of ten years of 0.065 mgd (0.1 cfs). The ratio of this low flow to the average design wastewater discharge from the 2.0 mgd WWTP is 1 to 31.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by the City of Easton, approximately 109 river miles away.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the SPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *WQR*.

C. DECISION

I. Effective on the approval date for Docket No. D-1965-039 CP-2 below:

a. The project described in Docket No. D-65-39 CP is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1965-039 CP-2; and

b. Docket No. D-65-39 CP is terminated and replaced by Docket No. D-1965-039 CP-2; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC in its SPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the

violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F.

i. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

j. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

k. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

l. The WWTP modifications shall be completed within three years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If the modifications have not been completed within three years of Docket Approval

and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the modifications to the existing WWTP shall expire. If approval of the modifications expire under this condition, the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of any modifications.

m. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

n. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

o. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

p. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

q. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

r. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

s. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

t. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In

accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

u. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

v. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

w. The modifications proposed in this docket are the first phase of a possible multi-phased upgrade to the WWTP. The work to be performed as part of this docket by itself has been determined to meet the Commission's definition of substantial alterations or additions. The docket holder is required to gain approval by the Commission to perform any portion of the future phased projects prior to final design.

x. The docket holder is required to submit an application to the Commission for its water withdrawals related to the WWTP service area that meet the Commission's review threshold of 100,000 gallons per day as a 30-day average within 60 days of approval of this docket (by February 3, 2013).

BY THE COMMISSION

DATE APPROVED: December 5, 2012

EXPIRATION DATE: May 31, 2015